

REMARKS

Claims 1, 2, 4-15, and 20 are presented for examination. Claims 1, 2, 4-15 and 20 are rejected. Claim 21 has been withdrawn from consideration. This Action is made Final.

By the present amendment, claim 1 has been replaced by new claim 22. Claim 22 contains the limitations regarding each of the ingredients requested by the Examiner. In addition, it is believed that claim 22 excludes the solvent-containing cyclodextrin complex products of the cited prior art.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

Although the Office Action lists claims 1, 2, 4-15 and 20 as pending in this application (claim 21 has been withdrawn from consideration), it appears that claim 16, which is drawn to the dosage form of claim 13, was inadvertently omitted from the pending claims. In the Preliminary Amendment filed on December 2, 1999 claims 17-19 were canceled leaving claims 1-16 and 20-21 as pending in the application. In the Office Action dated January 9, 2001 the Examiner listed claims 1-15 and 20-21 as pending in the application. In the amendment filed on April 6, 2001 applicant canceled claim 3 leaving claims 1, 2, 4-16 and 20-21 pending in the application. Since claim 16 was never canceled, it is assumed that the Final Rejection is directed to claims 1, 2, 4-16 and 20.

Claims 1, 2, 4-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Putteman *et al.* (US 5,814,330) or EPA 0,689,844 or WO 94/12217.

Putteman *et al.* disclose compositions comprising a drug (e.g., itraconazole) and cyclodextrin which are emulsions consisting of an aqueous phase and an oil phase.

EPA 0,689,844 discloses pharmaceutical compositions which are made by mixing a complex of vincristine and cyclodextrin, as the active substance, with pharmaceutically acceptable inert carriers and/or additive materials.

WO 94/12217 teaches a pharmaceutical composition comprising a therapeutic agent, a carboxy-containing polymer and cyclodextrin in an aqueous medium.

Applicant claims a pharmaceutical composition comprising a sparingly water-soluble drug, a cyclodextrin, a physiologically tolerable water-soluble acid and a physiologically tolerable water-soluble polymer wherein the physical state of the composition is a glass thermoplastic phase.

The Examiner has objected to the expression "is a glass thermoplastic phase" as not being limited to products disclosed in the specification "which are of a certain solid solution physical condition". The meaning of this rejection is not clear. The phrase in

question is a term of art used in thermodynamics to describe a system that is chemically and physically uniform or homogenous throughout or consists of one phase. There is support for the explanation of the expression "glass thermoplastic phase" on page 3, lines 11-14 of the specification. The phrase is merely used to describe the physical state of the composition.

The Examiner has indicated that "those skilled in the art are enabled to prepare compositions so vaguely defined as 'in a glass thermoplastic' phase' by following the preparative methods of the cited Prior Art and then evaporating and/or heating the cyclodextrin drug complexes." The Examiner appears to be confusing process claims with composition claims. Applicant is claiming a pharmaceutical composition. The Examiner appears to be saying that applicant's claimed composition can be prepared by first utilizing the preparative methods described in the prior art and then evaporating and/or heating the drug complex. The Examiner gives as the basis for his conclusion the fact that applicant's compositions are so vaguely defined "as in a glass thermoplastic phase". Whether or not the claimed compositions can or can not be prepared by the process proposed by the Examiner is inconsequential, since applicant is not claiming a process for preparing compositions whose physical state consists of a glass thermoplastic phase.

The Examiner goes on to state that the "Figures and specification Tables represent compositions of properties to which the claims are not limited." The Examiner has suggested that the claimed composition should be limited in such a way as to exclude solvent-containing cyclodextrin complex products disclosed in the cited Prior Art and that each ingredient should be listed in the form of a Markush group and in the effective amounts. The Examiner appears to be saying that, in order to overcome the obviousness rejection the physical characteristics of the solid solution need to be clearly set forth in the claims preferably in terms of "certain ranges" and that the claims should set forth the dissolution rate of the composition. By the present amendment claim 1 has been replaced by new claim 22 wherein each component is characterized by its amount in terms of percent by weight, the dissolution rate is set forth and the composition is limited to a solid composition. Support for the solid composition is found in the specification on page 2, line 37; for the percent of the water-soluble drug on page 12, line 27; the percent of the cyclodextrin on page 6, line 3; the percent of the water-soluble acid on page 6, line 24; the percent of the organic polymer on page 8, line 21; and the dissolution rate on page 17, lines 1-7. It is submitted that new claim 22 sets forth a composition which is not obvious in view of the prior art cited by the Examiner.

Reconsideration of the rejection of claims 1, 2, 4-16 and 20 under 35 U.S.C. 103(a) as being unpatentable over Putteman *et al.* (US 5,814,330) or EPA 0,689,844 or WO 94/12217 is courteously requested.

Claims 1, 2, 4-16 and 20 are rejected under 35 U.S.C. 112, paragraph 2. The Examiner has stated that "The improved result working property of dissolution time range is not claimed. This property is considered to be critical to defining the compositions as being unobvious in comparison to Prior Art Cyclodextrin complexes."

Applicant's attorney, Benjamin F. Lambert, requested clarification of the rejection from Supervisory Patent Examiner Thurman K. Page who concluded that the rejection under 35 U.S.C. 112, paragraph 2, was improper and instructed applicant's attorney to reply only to the rejection under 35 U.S.C 103(a). Therefore, a response to the rejection under 35 U.S.C. 112, paragraph 2 is not deemed necessary.

In view of the above discussion and the amendments herein being made to the claims, it is believed that all of the outstanding rejections and objections have been removed. A favorable disposition of the application is courteously requested. In the event the Examiner adheres to the Final Rejection, entry of the amendment is requested so that the record on appeal will be complete.

Respectfully submitted,


Mary A. Appolina
Reg. No. 34,087
Attorney for Applicants

Johnson & Johnson
One Johnson & Johnson Plaza
New Brunswick, NJ 08933-7003
(908)524-3742
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"Version with markings to show changes made."

IN THE CLAIMS

Cancel claim 1 without prejudice.

Add the following to replace claim 1:

22. (New) A solid pharmaceutical composition comprising by weight 0.001 to 50 % of a sparingly water-soluble drug compound, 5 to 70 % of a cyclodextrin, 1 to 95 % of a physiologically tolerable water-soluble acid, and 0.05 to 35 % of a physiologically tolerable water-soluble organic polymer characterized in that at 5, 15 and 45 minutes after addition of a quantity of the composition containing 100 mg of drug to 600 ml of 0.1 N hydrochloric acid at 37 °C, from 7 to 25 %, from 45 to 70 % and at least 96 % of drug compound is in solution in said hydrochloric acid.

Amend Claims 2, 4-5, 7, 10-13 and 20 as follows:

2. (Amended) The composition of claim + 22 characterised in that the weight ratios of drug compound to acid and of drug compound to cyclodextrin are no more than 2:1.

4. (Twice Amended) The composition of claim + 22 wherein the cyclodextrin is 2-hydroxypropyl- β -cyclodextrin.

5. (Twice Amended) The composition of claim + 22 wherein the acid is selected from the group comprising citric, fumaric, tartaric, maleic, malic, succinic, oxalic, malonic, benzoic, mandelic and ascorbic acid.

7. (Twice Amended) The composition of claim + 22 wherein the polymer is selected from the group comprising

- alkylcelluloses such as methylcellulose,
- hydroxyalkylcelluloses such as hydroxymethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose and hydroxybutylcellulose,
- hydroxyalkyl alkylcelluloses such as hydroxyethyl methylcellulose and

- hydroxypropyl methylcellulose,
- carboxyalkylcelluloses such as carboxymethylcellulose,
- alkali metal salts of carboxyalkylcelluloses such as sodium carboxymethylcellulose,
- carboxyalkylalkylcelluloses such as carboxymethylethylcellulose,
- carboxyalkylcellulose esters,
- starches,
- pectins such as sodium carboxymethylamylopectin,
- chitin derivates such as chitosan,
- heparin and heparinoids,
- polysaccharides such as alginic acid, alkali metal and ammonium salts thereof, carrageenans, galactomannans, tragacanth, agar-agar, gum arabic, guar gum and xanthan gum,
- polyacrylic acids and the salts thereof,
- polymethacrylic acids and the salts thereof, methacrylate copolymers,
- polyvinylalcohol,
- polyvinylpyrrolidone, copolymers of polyvinylpyrrolidone with vinyl acetate,
- polyalkylene oxides such as polyethylene oxide and polypropylene oxide and copolymers of ethylene oxide and propylene oxide, e.g. poloxamers and poloxamines.

10. (Twice Amended) The composition of claim + 22 wherein the drug is a basic compound.

11. (Twice Amended) A composition according to claim + 22 that dissolves rapidly in body fluids, characterized in that it comprises from 50 to 95 % by weight of acid.

12. (Twice Amended) A composition according to claim + 22 that provides sustained release of the drug, characterized in that it comprises a water soluble polymer having an apparent viscosity of more than 1,000 mPa.s when dissolved in a 2% aqueous solution at 20°C.

13. (Twice Amended) A pharmaceutical dosage form comprising a therapeutically

effective amount of a pharmaceutical composition as defined in claim + 22.

20. (Twice Amended) A method of therapy or diagnosis of the human or non-human animal body which comprises administering to said body a therapeutically or diagnostically effective dose of a pharmaceutical composition according to claim + 22.